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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/956,912	09/21/2001	Osamu Kakinuma	212903US3	2653

22850 7590 02/03/2003

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ALEXANDRIA, VA 22314

EXAMINER

BOCHNA, DAVID

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 02/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/956,912

Applicant(s)

KAKINUMA, OSAMU

Examiner

David E. Bochna

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 19-22 and 24-27 is/are rejected.
- 7) ☐ Claim(s) 23 and 28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 19 is rejected under 35 U.S.C. 102(b) as being anticipated by EPO 0,036,984.

In regard to claim 19, EPO 0,036,984 discloses a branch pipe joint comprising:

A branch pipe joint body 10 having a hollow closed shape;

A plurality of communication ports 15, 16 provided in the branch pipe joint body, the communication ports having the same inner diameter as each other;

a plurality of connecting pipes 28-30 through which refrigerant can separately flow, each of the connecting pipes having one end portion 24 firmly fixed (by threads) to the communication port in a state of being fitted to the communication port and another end portion 28-30 firmly fixed to one of the plurality of refrigerant pipes having different outer diameters of the multi-unit type air conditioner, the firmly fixing operation being performable at an installation site of the multi-unit type air conditioner in which another end portion is fitted to the one of the refrigerant pipes; and

a common communication port 18 through which the refrigerant can flow in a confluent state, the common communication port being provided in branch pipe joint body;

wherein the plurality of connecting pipes 28-30 each has one end portion 24 fitted to one

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of the communication ports 14-16 and another end portion fitted to one of the refrigerant pipes having different outer diameters, each of the one end portions having the same outer diameter, while at least some of the another end portions have inner diameters different from each other (30 is different from 28 and 29).

3. Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over EPO Patent 0,036,984 in view of Worthen et al.. In regard to claims 20-21, EPO Patent 0,036,984 discloses a branch pipe joint as described above. However, EPO Patent 0,036,984 does not disclose that the connecting pipes and pipes are welded or brazed to the branch pipe. Worthen et al. teaches welding or brazing the connecting pipes 11 and pipes 12 (see column 3, lines 52-56) to a branch pipe 6 in order to create a permanent, leak free connection. Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the connections of EPO Patent 0,036,984 to include welded or brazed joints, as taught by Worthen et al., in order to create permanent, leak free connections between the pipe joint members.

In regard to claim 22, Worthen et al. also teaches providing the pipe joint body with a Y-shape having two branched portions 30 and one root portion 10 to reduce the costs and difficulties in assembling traditional branched connections. Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the connecting pipes of EPO Patent 0,036,984 to include a Y-pipe, as taught by Worthen et al., so that assembly could be achieved more easily and at a cheaper cost.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over EPO Patent 0,036,984.

In regard to claim 24, EPO Patent 0,036,984 discloses a method of connecting refrigerant pipes of a multi-unit type air conditioner, the method comprising the steps of:

preparing a branch pipe joint body 10 having a hollow shape and a plurality of communication ports 14-16 each having the same inner diameter;

selecting connecting pipes 28-30 from a group of connecting pipes at an installation site of the multi-unit type air conditioner, each of the selected connecting pipes having one end portion 24 having an outer diameter enabling the one end portion to be fitted to the communication ports 14-16 and another end portion having an inner diameter enabling the another end portion 28-30 to be fitted to one of the plurality of the refrigerant pipes having different outer diameters, said group of connecting pipes and branch pipe joint body having been packed in one package; and

connecting the branch pipe joint body to the refrigerant pipes through the selected connecting pipes using firm fixing (threads). However, EPO Patent 0,036,984 does not disclose that the number of connecting pipes in the group of the connecting pipes is larger than the number of the communication ports, and is set such that a total number of the connecting pipes

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having a minimum inner diameter and a maximum inner diameter is smaller than a number of the connecting pipes having an inner diameters other than the minimum and maximum inner diameters. Worton teaches providing a connecting pipe adapter kit (see fig. 1) where the number of connecting pipes in the group of the connecting pipes (58, 60, 62, 64, 66, 68) is larger than the number of the communication ports 20, and is set such that a total number of the connecting pipes having a minimum inner diameter and a maximum inner diameter is smaller (66, 68) than a number of the connecting pipes having an inner diameters other than the minimum and maximum inner diameters (58, 60, 62, 64, 66, 68) so that the pipe joint 20 would be connectable to a plurality of pipe ends. Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the connecting pipes of EPO Patent 0,036,984 to include more connecting pipes than communication ports, as taught by Worton, so that the communication ports could be coupled with many different sized pipe ends.

6. Claims 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over EPO Patent 0,036,984 in view of Worton and further in view Worthen et al.. In regard to claims 25-26, EPO Patent 0,036,984 in view of Worton discloses a branch pipe joint as described above. However, EPO Patent 0,036,984 in view of Worton does not disclose that the connecting pipes and pipes are welded or brazed to the branch pipe. Worthen et al. teaches welding or brazing the connecting pipes 11 and pipes 12 (see column 3, lines 52-56) to a branch pipe 6 in order to create a permanent, leak free connection. Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the connections of EPO Patent 0,036,984 to include welded or brazed joints, as taught by Worthen et al., in order to create permanent, leak free connections between the pipe joint members.

In regard to claim 27, Worthen et al. also teaches providing the pipe joint body with a Y-shape having two branched portions 30 and one root portion 10 to reduce the costs and difficulties in assembling traditional branched connections. Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the connecting pipes of EPO Patent 0,036,984 to include a Y-pipe, as taught by Worthen et al., so that assembly could be achieved more easily and at a cheaper cost.

Allowable Subject Matter

7. Claims 23 and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. Applicant's arguments filed 11/18/02 have been fully considered but they are not persuasive. Applicant argues that present application overcomes the prior art of EPO Patent 0,036,984 because EPO Patent 0,036,984 does not disclose that the connecting pipes are "firmly fixed" in the manner of the present application, and that the manner in which the connecting pipes of EPO Patent 0,036,984 are connected has drawbacks that the connection process of the present application avoids. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., connected through non-rotation) are not recited in the rejected claim(s). Although the

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claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Aikawa et al., Shiroyama et al., Lorber, Ringel et al., all disclose similar couplings common in the art.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. Bochna whose telephone number is (703) 306-9040. The examiner can normally be reached on 8-5:30 Monday-Thursday and every other Friday.

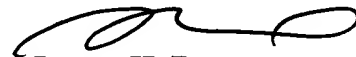
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H. Browne can be reached on (703) 308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9326 for regular communications and (703) 872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168.



David Bochna
January 27, 2003



Lynne H. Browne
Supervisory Patent Examiner
Group 3600